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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/762,922	02/14/2001	Kari Einamo	PM 277084 1058		
909	7590 01/26/2006		EXAMINER		
PILLSBUR	RY WINTHROP SHAW	CHO, UN C			
P.O. BOX 10500 MCLEAN, VA 22102			ART UNIT	PAPER NUMBER	
MCLLIN,	VI 22102		2687		
			DATE MAILED: 01/26/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	No.	Applicant(s)					
Office Action Summary		09/762,922		EINAMO, KARI					
		Examiner		Art Unit					
		Un C. Cho		2687					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply									
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).									
Status									
2a)□	Responsive to communication(s) filed on <u>09</u> This action is <b>FINAL</b> . 2b) The Since this application is in condition for allowed closed in accordance with the practice under	is action is nor ance except fo	n-final. or formal matters, pros		e merits is				
Dispositi	on of Claims								
5) ☐ 6) ☑ 7) ☐ 8) ☐ <b>Applicati</b> 9) ☐ 10) ☐	Claim(s) 1-12 is/are pending in the applicatio 4a) Of the above claim(s) is/are withdra Claim(s) is/are allowed.  Claim(s) 1-12 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/  on Papers  The specification is objected to by the Examin The drawing(s) filed on is/are: a) ac  Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre	awn from cons  for election required  cepted or b)  edrawing(s) be  ection is required	uirement.  objected to by the E held in abeyance. See if the drawing(s) is obje	37 CFR 1.85(a). ected to. See 37 Cl	* *				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority u	ınder 35 U.S.C. § 119								
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>									
2) Notic 3) Inform	t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08 r No(s)/Mail Date		) Interview Summary ( Paper No(s)/Mail Dat ) Notice of Informal Pa ) Other:	te	<b>)</b> -152)				

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#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/09/2005 has been entered.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1 4, 7, 8, 10 and 11 are rejected under 35 U.S.C. 102(e) as being anticipated by Criss et al. (US 2006/0002340 A1).

Regarding claim 1, Criss discloses a method of tracing signaling messages of a subscriber in a mobile communication system, which comprises functional entities for subscriber mobility management, the method comprising: transmitting and receiving signaling messages in a functional entity (a host

computer (Fig. 1, 30) connected to a base station (Fig. 1, 26) receives and transmits messages from and to a mobile station (Fig. 1, 36), Criss, Page 3. Paragraph 0040, line 9 through Page 4, Paragraph 0042, line 8), receiving a trace command in said functional entity, the command indicating the tracer and identifying at least one subscriber whose signaling messages are to be traced (the host computer identifies the particular mobile station to be traced to check whether it has the most up-to-date version of operating software. Criss, Page 4. Paragraph 0044, lines 1 – 32 and Page 7, Paragraph 0063, line 1 through Paragraph 0063, line 4), starting tracing which comprises sending to the tracer a copy of a signaling message in response to the reception or transmission of a signaling message related to the subscriber to be traced (the host computer has a bootptab table where it stores all outgoing and incoming messages that are sent to and received from a mobile station), wherein the copy of the signaling message sent to the tracer is identical to the signaling message of the subscriber (message stored within the bootptab is identical to the message of the subscriber, Page 5, Paragraph 0054, line 1 through Page 6, Paragraph 0055, line 20).

Regarding claim 2, Criss discloses wherein the trace command also indicates the type of the signaling message to be traced (determining the version of the operating software of a particular mobile station), and the copy of the signaling message is sent only if the signaling message is of the type to be

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traced (host computer's bootptab table only stores this particular information)
(Criss, Page 5, Paragraph 0054, line 1 through Page 6, Paragraph 0055, line 20).

Regarding claim 3, Criss discloses wherein tracing starts from the start message of a dialogue related to the subscriber to be traced (the host computer receives the Bootp Request Packet and then it identifies the particular mobile station to be traced to check whether it has the most up-to-date version of operating software, Criss, Page 4, Paragraph 0044, lines 1 – 32 and Page 7, Paragraph 0063, line 1 through Paragraph 0063, line 4).

Regarding claim 4, Criss discloses wherein tracing of the subscriber's signaling message stops in response to the fact that the dialogue which started tracing ends (it would have been obvious to one of ordinary skill in the art that if there is no need for an update to the most current version of operating software or if there is a need for an update the mobile station it will or will not be updated accordingly and then the process will end, Criss, Page 4, Paragraph 0044, lines 1 – 32 and Page 7, Paragraph 0063, line 1 through Paragraph 0063, line 4).

Regarding claims 7 and 10, the claims are interpreted and rejected for the same reason as set forth in claim 1.

Regarding claims 8 and 11, the claims are interpreted and rejected for the same reason as set forth in claim 2.

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## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Criss in view of Sanmugam (US 5,734,977).

Regarding claim 5, Criss as applied above does not specifically disclose receiving a stop command of tracing in the entity, the command indicating the subscriber whose signaling message tracing is to be stopped, and stopping tracing of the signaling messages related to said subscriber. In an analogous art, Sanmugam discloses receiving a stop command of tracing in the entity, the command indicating the subscriber whose signaling message tracing is to be stopped, and stopping tracing of the signaling messages related to said subscriber (Sanmugam, Col. 25, lines 63 – 67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sanmugam to the system of Criss in order to provide an efficient way of allocating network resources as needed by the operator.

6. Claims 6, 9 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Criss in view of Clarke et al. (US 5,793,752).

Regarding claim 6, Criss as applied above does not specifically disclose wherein the signaling messages of the MAP protocol are traced. In an analogous art, Clarke discloses wherein the signaling messages of the MAP protocol are traced (Clarke, Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Clarke to the system of Criss in order to provide a monitoring system that can provide an accurate feedback to the user just by recognizing a predetermined set of message characteristics, which is sufficient to identify a type of node functionality, and associating the type of functionality identified by said set of characteristics with said particular node.

Regarding claim 9, Criss in view of Clarke as applied above discloses wherein the signaling messages to be traced are message of the MAP protocol (Clarke, Col. 5, line 25 through Col. 6, line 15 and Col. 11, lines 23 – 29), and the network element is arranged to start sending copies of the signaling messages related to the subscriber in response to the dialogue of the MAP protocol which starts after the trace command and is related to the subscriber to be traced (monitoring probes send feedback to the central station, Clarke, Col. 9, lines 9 – 25).

Regarding claim 12, the claim is interpreted and rejected for the same reason as set forth in claim 9.

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## Response to Arguments

7. Applicant's arguments with respect to claims 1 – 12 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un C. Cho whose telephone number is (571) 272-7919. The examiner can normally be reached on M ~ F 8:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Un C Cho

1/20/06 cre

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